ABSTRACT OF THE DISCLOSURE

A super-regenerative receiver is provided with a regenerative oscillator controlled by a frequency sweep circuit to control the bandwidth at which the receiver can receive a signal. A quench control circuit controls both the regenerative oscillator and the frequency sweeping circuit to "turn on" at the same time. The frequency sweep circuit forces the regenerative oscillator to function as a center frequency movable bandpass filter allowing the receiver to automatically tune to the actual transmitter frequency f_{tx} to provide the best reception. This allows the receiver/filter bandwidth to be very narrow. The receiver operates as an amplitude detector, as well as a frequency or phase detector, thereby allowing the same receiver to detect AM (ASK) signals and FM or FSK signals without adding a frequency discriminator.